

Attorney Docket No. 7701

REMARKS**35 U.S.C. 103 (a) Rejection Based Upon Fisher et al. in view of Rao et al.**

Claims 1-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al., U.S. Patent No. 6,762,832, in view of Rao et al., U.S. Patent No. 5,278,074. In particular, the Examiner states

It would have been obvious to one of ordinary skill in the art to substitute the fluorescent measurement/monitoring taught by Rao et al., for the spectroscopic monitoring in the corrosion control system of Fisher et al., because the fluorescent system does not degrade the preferred corrosion inhibitors, and in fact, utilizes their inherent characteristics for more accurate concentration readings.

Applicants respectfully traverse this rejection because it would not have been obvious to substitute the fluorescent measurement/monitoring taught by Rao et al., for the spectroscopic monitoring in the corrosion control system of Fisher et al.

Fisher et al. describes both a method for monitoring and controlling the concentration of a corrosion inhibitor, for example a triazole, in a composition and a semiconductor processing method that monitors and controls the concentration of a corrosion inhibitor, for example a triazole, by performing an absorption spectroscopy measurement on a sample of said composition and a sample of the solution, respectively. Fisher et al. further describes a semiconductor processing system that includes a chemical bath tank containing a solution for treating a semiconductor substrate; one or more conduits for introducing process materials into the chemical bath; the process materials containing a component to be monitored; an absorption spectroscopy apparatus for measuring the concentration of the component in a sample of the solution; and a feedback control means for controlling the concentration of the component in the solution based on the absorption spectroscopy measurement. Fisher et al. unequivocally states that "the present invention operates on the basis of light absorption." (Column 3, lines 29-30).

Rao et al. describes a fluorometric method for monitoring and controlling the concentration of aromatic azole corrosion inhibitors in the water of an industrial aqueous system which is based upon the measurement of the aromatic azole corrosion inhibitor itself, and the precise determination of concentration permits control of the dosage of such aromatic azole corrosion inhibitor. Rao describes a method for monitoring that involves fluorescing a

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sample of water from the aqueous system, and determining the concentration of the aromatic azole concentration inhibitor from its fluorescent intensity. Rao additionally describes the further step of maintaining a desired concentration of an aromatic corrosion inhibitor by adding a sufficient amount of corrosion inhibitor to the aqueous system. The invention is applicable to industries that require corrosion inhibitors for aqueous systems, such as cooling water systems, boilers, and other water streams, and in particular for industrial scale aqueous systems. This disclosure does not mention the use of this technique for semiconductor devices.

Applicants assert that one of ordinary skill in the art would not substitute the fluorescent measurement/monitoring taught by Rao et al., for the spectroscopic monitoring in the corrosion control system of Fisher et al., because the operating conditions which occur in semiconductor devices are very different from conditions which occur in industrial systems exemplified in Rao et al., cooling water systems and boiler water systems. In cooling water and boiler water systems there can be significant levels of anions/cations. In the present application, however, ultrapure water is used as a matrix and special materials of construction are required to maintain the integrity of the ultrapure water.

In addition, there is no one to one correlation between applying a method that operates on the basis of fluorescence and a method that operates on the basis of light absorption.

Moreover, Fisher et. al's "affirmative statement" that the "present invention operates on the basis of light absorption," further buttresses the argument that one of ordinary skill in the art would not be motivated to substitute the two analytical techniques or combine the two pieces of prior art that were cited by the Examiner.

Based upon the above remarks, it is apparent the Examiner's conclusion comes solely from hindsight reconstruction after reading the pending application.

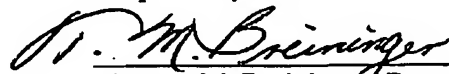
Therefore, Applicants respectfully request that the Examiner withdraw this rejection and issue a Notice of Allowance for claims 1-21.

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CONCLUSION

Applicants submit that based upon the above Remarks all pending claims are in condition for allowance and respectfully request that a Notice of Allowance be sent for the application.

Respectfully Submitted,



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